

VIVIPARY IN *TILLANDSIA TENUIFOLIA* L.

(WITH ONE FIGURE)

SMALL, in his *Flora S. E. United States*, gives the range of this species of *Tillandsia* as in swamps and about rivers in Georgia and Florida, also in tropic America. Its normal method of reproduction is by small, light, pointed seeds, to which are attached a bunch of hairs that spread out at the top horizontally, thus acting as a parachute for wind carriage. This in connection with the epiphytic life is the most suitable method by which the seeds can find lodgment upon some limb or tree trunk and grow attached some distance above the ground.

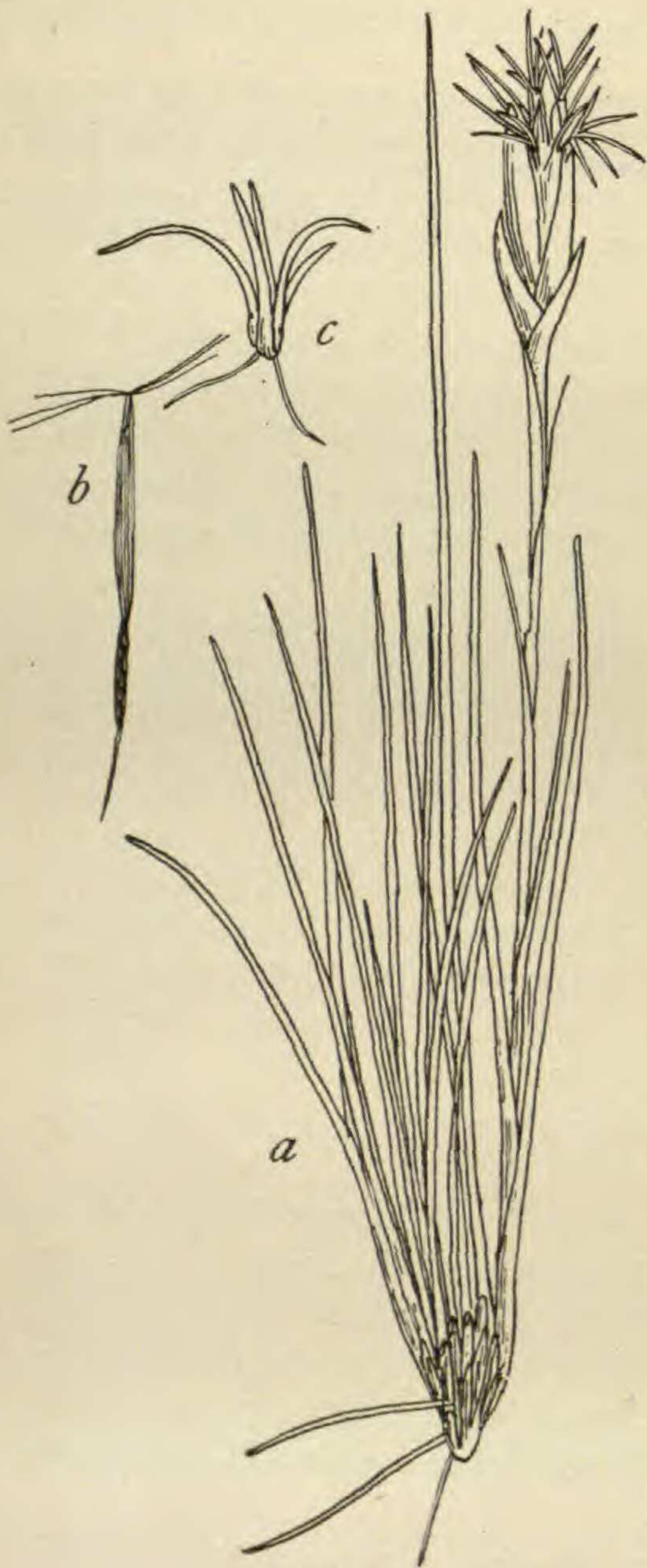


FIG. 1

Another method of reproduction by the adoption of a viviparous habit was discovered in this plant in a specimen brought from the south on the branch of a forest tree which was hung in the greenhouses of the University of Pennsylvania. In the three or four plants examined, it was found that the seeds in all cases (*fig. 1, b*) had germinated in the capsules (*fig. 1, a*), and that the seedling plants thus produced (*fig. 1, c*) had two or three short shoots, as well as four or five awl-shaped leaves arranged in the tufted manner of the mature plant. These small plants were ready to fall out of the cells of the capsule whenever the dry valves spread far enough apart to permit this discharge to take place. Whether this viviparous habit is shown by all the species of *Tillandsia*, I cannot state, but it seems

to be a method by which additional surety is given to the perpetuation of the species. —JOHN W. HARSHBERGER, *University of Pennsylvania*.